

WHAT IS CLAIMED IS:

1. A USB flash memory device for displaying a memory storage capacity, comprising:
 - 5 a flash memory module including at least one flash memory;
 - a USB controller for controlling storage of data in and reading of data from the flash memory module;
 - a display controller for storing memory storage capacity information of the flash memory module in a usage display register;
 - 10 a display window for displaying a value that is based on a content of the usage display register; and
 - a power unit for supplying power to the USB flash memory device.
2. The USB flash memory device of claim 1, wherein the flash memory includes a state storage area in which the content of the usage display register is stored.
3. The USB flash memory device of claim 1, wherein the display controller includes the usage display register and further comprising:
 - 20 a controller for receiving a last used address from the flash memory module and comparing the last used address with an overall capacity of the flash memory module to determine the memory storage capacity information; and

a multiplexer for selectively outputting the value that is based on the content of the usage display register or an output of the USB controller to be transmitted by the display window.

5 4. The USB flash memory device of claim 3, wherein the usage display register is directly controlled by the USB controller.

10 5. The USB flash memory device of claim 1, wherein, upon returning from a power-down mode of the USB flash memory module, the USB controller determines the memory storage capacity information of the flash memory module.

15 6. The USB flash memory device of claim 1, wherein when the power unit is activated, the USB controller determines the memory storage capacity information of the flash memory module.

20 7. The USB flash memory device of claim 1, wherein the display window further displays current time, data storage time, or data transfer information.

20 8. The USB flash memory device of claim 1, wherein the display window displays the memory storage capacity information using a graphic display.

9. The USB flash memory device of claim 8, wherein the graphic display comprises an LED array.

10. The USB flash memory device as recited in claim 1, wherein the
5 display window comprises a liquid crystal display (LCD) window.

11. A flash memory device comprising:
a data storage area in which a plurality of flash cells are disposed in a
matrix of rows and columns; and
10 a state storage area storing a last address used of the data storage area.

12. The flash memory device as recited in claim 11, wherein the
state storage area includes a register storing the last address.

15 13. A USB flash memory device comprising:
at least one flash memory device for storing data;
a USB connector for transferring data packets onto a USB bus and for
receiving data packets from the USB bus, the USB connector being configured
to be coupled to the USB bus;
20 a folding portion for enabling the USB flash memory device to be
folded, the folding portion being disposed proximal to the USB connector.

14. A USB flash memory device, comprising:

a flash memory module including at least one flash memory;

a USB connector for transferring data packets onto a USB bus and for receiving the data packets from the USB bus, the USB connector being

5 configured to be coupled to the USB bus;

a USB controller for controlling the USB connector according to the data packets and for controlling storage of data in and reading of data from the flash memory module;

a display controller for storing a memory storage capacity information

10 of the flash memory module in a usage display register;

a display window for displaying a value that is based on a content of the usage display register;

a power unit for supplying power to the USB flash memory device; and

a folding portion for enabling the USB flash memory device to be

15 folded, the folding portion being disposed proximal to the USB connector.

15. The USB flash memory device as recited in claim 14, wherein

the flash memory includes:

a data storage area in which a plurality of flash cells are disposed in a

20 matrix of rows and columns; and

a state storage area storing a last address used of the data storage area.